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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,700	12/20/2001	Mark Skiba	47612/LTR/G319	4165

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EXAMINER

THAI, TUAN V

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/027,700

Applicant(s)

MARK SKIBA ET AL.

Examiner

Tuan V. Thai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-13 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/20/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2 and 6.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

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**Part III DETAILED ACTION**

***Specification***

1. Claims 9-13 are presented for examination. Claims 1-8 are subjected to the restriction requirement, and being withdrawn from further consideration.
2. It should be noted that (a) claims 1-3 and 6 of the current application are identical respectively to claims 8-10 and 15 of the parent application 09/118,218 which falls in group II of the previous restriction requirement; and (b) claims 4-5 and 7-8 of the current application are also identical respectively to claims 11-12 and 16-17 which falls in group III of the previous restriction requirement. Claims 1-7, 13-14 and 18; group I; of the parent application 09/118,218 were selected for examination. Claims 9-13 of the current application is further subjected to restriction requirement detailed below, hereinafter being referred to as group IV; please refer to the parent application for details restriction requirement of the original groups I-III.
3. Applicant is reminded of the duty to fully disclose information under 37 CFR 1.56.

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#### NOTIFICATION OF OBJECTION AND/OR REJECTIONS

##### *Election of Species/Restriction*

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group IV. Claims 9-13, drawn to a different method of incrementally backing up of data by storing the differences in the copy of the updated data in the backup memory, classified under class 711 subclass 162.

The inventions are distinct, each from the other for the following reasons:

The invention of groups II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, the invention of group II has separate utility such as creating the backup copy of the data utilizing date-stamp and time-stamp version, also to redirect the operating system in accordance with the backing-up which is different from invention of group III that has a separate utility of system for creating and maintaining a single virtual logical volume of electronic data space with electronic data storage space located on a plurality of physical storage volumes. See M.P.E.P. § 806.05(d).

The invention of groups II and IV are related as subcombinations disclosed as usable together in a single

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combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, the invention of group IV has separate utility such as method of incrementally backing up of data by storing the differences in the copy of the updated data in the backup memory which is different from invention of group II that has a separate utility of creating the backup copy of the data by utilizing date-stamp and time-stamp version of data, also to redirect the operating system in accordance with the backing-up. See M.P.E.P. § 806.05(d).

The invention of groups III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, the invention of group III has a separate utility of system for creating and maintaining a single virtual logical volume of electronic data space with electronic data storage space located on a plurality of physical storage volumes which is different from invention of group IV that has separate utility such as method of incrementally backing up of data by storing the differences in the copy of the updated data in the backup memory. See M.P.E.P. § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by

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their different classification and recognized divergent subject matter, and because the search required for one group is not coextensive with the search required for the other groups, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. LeRoy T. Rahn (Reg. No. 20,356) on February 05, 2004; a provisional election was made with traverse to prosecute the invention of group IV, claims 9-13. Claims 1-8 are therefore withdrawn from further consideration by the Examiner.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

#### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under

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this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 8. Claims 9-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by Uemura et al. (USPN: 5,720,026); hereinafter Uemura.

As per claim 9; Uemura discloses the invention as claimed including a method for backing up data stored in files as the data is updated, comprising the following conventionally steps known as incremental backup (e.g. see abstract): updating one of the files, temporarily storing a copy of the updated file, comparing the copy of the updated file the file prior to updating, storing the differences in the copy of the updated file, and repeating the above steps each time when one of the

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files is updated (e.g. see column 1, lines 46-49; column 2, line 25 bridging column 3, line 3);

As per claims 10 and 13, the further limitations of restoring concept wherein temporarily storing a copy of the current version of the file being restored, applying the stored difference to the stored copy of the current version to produce a copy of an earlier version of the data/file being restored (by the difference management mechanism 203 detailed below), and repeated the steps until a desired version of data/file is produced are taught by Uemura; for example, starting at column 10, lines 8-13; Uemura teaches to restore the incremental backup data, *the incremental backup data which is temporarily saved via the pseudo device driver interface can be written into the pseudo device driver interface in sequence for the backup volume* (or data file) where data to the generations preceding the incremental backup is already restored (e.g. see column 10, lines 8-13), Uemura further discloses when the incremental backup data is restored, or when the difference map information 600 and block data gotten as the incremental backup data are written into the pseudo device driver (which can be used from a file system for file restoring; e.g. column 6, lines 23-24), the difference management mechanism 203 restores the block data (or file data) to the disk unit or the logical disk unit where the backup in the generation to reproduce the difference data is complete based on

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the received difference map information 600 (e.g. see column 6, lines 36 et seq). By this rationale, claims 10 and 13 are rejected.

As per claims 11 and 12; the further limitation of the temporarily stored copy is stored until the next time one of the files is updated is embedded in the incremental backup operation that is taught by Uemura, since (a) it is well-known and notorious old that in the incremental backup operation, only the difference data updated since the most recent backup is being backed up without backing the entire data, and (b) Uemura clearly teach that whenever incremental backup is performed, data indicating whether or not blocks have been updated is registered/stored in the difference map information 600 **over** backup generations, update data is temporarily stored/registered until the next update (e.g. see column 5, lines 21-36). By this rationale, claims 11 and 12 are rejected.

#### **Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V.

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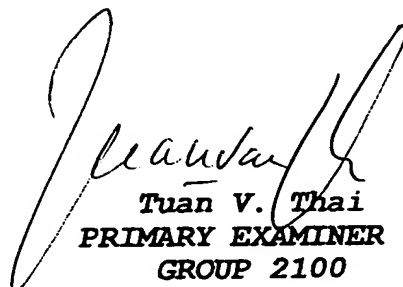
Thai whose telephone number is 703-305-3842. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

TVT

February 06, 2004



Tuan V. Thai  
PRIMARY EXAMINER  
GROUP 2100